

REMARKS

Reconsideration of the above identified application in view of the preceding amendments and following remarks is respectfully requested. Claims 1-16 are pending in this application. By this Amendment, new Claims 11-16 have been added by this amendment. The claim amendments were made to more precisely define the invention in accordance with 35 U.S.C. 112, paragraph 2. It is respectfully submitted that no new matter has been introduced by these amendments, as support therefor is found throughout the specification and drawings.

In the Office Action, Claims 1 and 5 were rejected under 35 U.S.C. §102(b) over U.S. Patent No. 5,466,389 to Ilardi et al. The Examiner's grounds for rejection are herewith traversed, and reconsideration is respectfully requested.

Ilardi et al. discloses alkaline cleaning compositions that require aqueous metal ion free bases, a nonionic surfactant and a component to control pH within a range of about pH 8 to pH 10 (col. 2, lines 29-37). The goal of Ilardi et al. is to clean without producing undue etching of the wafer surfaces (col. 1, lines 10-11).

In contrast, Claim 1 recites a method for producing silicon wafers with improved surface features, including the steps of (a) supplying a substrate fabricated substantially of silicon and (b) exposing the substrate to an etching bath containing a caustic etching solution including an additive, wherein the additive is a chlorite salt, an iodate salt, or a mixture thereof. Consequently, the invention as claimed is directed to achieving desirable surface characteristics while etching wafers. Ilardi et al. do not disclose or suggest such a method because the teachings of Ilardi et al. are directed to merely a method for cleaning wafers that minimizes the etching effects. Further, Ilardi et al. teach

away from the claimed composition in that their cleaning solution requires aqueous metal ion free bases, a nonionic surfactant and a component to control pH. Claim 1 has no such requirements. Accordingly, Claim 1 and each of the claims depending therefrom distinguish the subject invention from Ilardi et al. and withdrawal of the rejection is respectfully requested.

In the Office Action, Claims 2, 3 and 6-8 were rejected under 35 U.S.C. § 103 (a) over Ilardi et al. in view of U.S. Patent No. 5,714,407 to Maeno et al.

As noted above, Ilardi et al. disclose a cleaning solution that require aqueous metal ion free bases, a nonionic surfactant and a component to control pH.

Maeno et al., on the other hand, disclose an etching agent for creating continuous fine patterns in aluminum or amorphous silicon.

It is respectfully submitted that one would not have been motivated to combine teachings from Maeno et al. with Ilardi et al. Maeno et al. is directed to etching amorphous silicon while Ilardi et al. discloses a cleaning solution that tries to avoid undue etching effects. Thus, Maeno et al. and Ilardi et al. are working toward opposite goals and are not properly combined. Further, Maeno et al. does not overcome the deficiencies of Ilardi et al., as noted above with respect to Claim 1. In short, Ilardi et al. does not teach anything about etching but rather cleaning wafers without undue etching effects. Accordingly by virtue of their dependency on Claim 1, Claims 2, 3 and 6-8 are not rendered obvious by the combination of references cited by the Examiner and withdrawal of the rejection under 35 U.S.C. §103 (a) is respectfully requested.

In the Office Action, Claim 9 was rejected under 35 U.S.C. § 103 (a) over Ilardi et al. in view of U.S. Patent No. 6,431,186 to Morita et al.

As noted above, Ilardi et al. disclose a cleaning solution that require aqueous metal ion free bases, a nonionic surfactant and a component to control pH.

Morita et al. disclose a process for cleaning electronic components that includes using sonic vibrations. Morita et al. disclose using sodium chlorite as an oxidizing agent.

It is respectfully submitted that Morita et al. does not overcome the deficiencies of Ilardi et al., as noted above with respect to Claim 1. In short, Morita et al., like Ilardi et al., does not teach anything about etching but rather is directed to cleaning electronic components. Thus, Claim 1 by being directed to etching patentably distinguishes over the cited combination. Accordingly, Claim 9, by virtue of its dependency on Claim 1, is not rendered obvious by the combination of references cited by the Examiner and withdrawal of the rejection under 35 U.S.C. §103 (a) is respectfully requested.

Any additional fees or overpayments due as a result of filing the present paper may be applied to Deposit Account No. 04-1105. It is respectfully submitted that all of the claims now in this application, namely Claims 1-16, are in condition for allowance, and such action is earnestly solicited.

If after reviewing this amendment, the Examiner believes that a telephone interview would facilitate the resolution of any remaining matters the undersigned attorney may be contacted at the number set forth herein below.

Respectfully submitted,

Date: September 19, 2005

George Chacras

George N. Chacras, Reg. No. 46,608
Edwards & Angell LLP
Attorney for Applicants
P.O. Box 55874
Boston, MA 02205
Tel: (401) 276-6653
Fax: (888) 325-1684
Email: gchacras@edwardsangell.com